

US 6,291,009 B1

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-continued

<u>WET INGREDIENTS</u>	
Water	32% by weight of total dough

-continued

5	Corn masa	9% by weight of dry ingredients
	Lecithin	1% by weight of dry ingredients
<u>WET INGREDIENTS</u>		
	Water	30% by weight of total dough

## EXAMPLE 3

Ingredients, and their relative amounts, which may be used to prepare a cohesive soy-based machineable dough for producing a snack having a leavened pita-bread like appearance, flavor, and texture, are:

<u>DRY INGREDIENTS</u>	
Full-fat roasted soy flour	63% by weight of dry ingredients
Soy grits-fine mesh	8% by weight of dry ingredients
Pre-gelatinized corn starch	12% by weight of dry ingredients
Pre-gelatinized rice flour	9% by weight of dry ingredients
Potato starch	7% by weight of dry ingredients
Active dry yeast	0.2% by weight of the dry ingredients
Lecithin	0.8% by weight of dry ingredients
<u>WET INGREDIENTS</u>	
Water	35% by weight of total dough

## EXAMPLE 4

Ingredients, and their relative amounts, which may be used to prepare a cohesive soy-based machineable dough for producing a snack having a leavened cracker like appearance, flavor, and texture, are:

<u>DRY INGREDIENTS</u>	
Full-fat roasted soy flour	60% by weight of dry ingredients
Soy grits	9% by weight of dry ingredients
Pre-gelatinized corn starch	12% by weight of dry ingredients
Pre-gelatinized rice flour	10% by weight of dry ingredients
Baking powder	1% by weight of the dry ingredients
Soy oil	7% by weight of the dry ingredients
Lecithin	1% by weight of dry ingredients
<u>WET INGREDIENTS</u>	
Water	33% by weight of total dough
Soy milk	2% by weight of total dough

## EXAMPLE 5

Ingredients, and their relative amounts and the method, which may be used to produce a soy-based product having a tortilla-chip like appearance, flavor, and texture, are:

<u>DRY INGREDIENTS</u>	
Full-fat roasted soy flour	61% by weight of dry ingredients
Soy grits	10% by weight of dry ingredients
Pre-gelatinized Corn Starch	10% by weight of dry ingredients
Potato starch	9% by weight of dry ingredients

To make a tortilla-chip, the dry ingredients were measured and then mixed using a 600 lb. Peerless Paddle Mixer. Water at 120° F. was added in stages to determine the proper point of hydration, for example until about 30.3% by weight of the total dough was reached. After mixing for approximately 7 minutes, the dough was fed to a Casa Herrera single-stage sheeter having an 8-row cutter, and operating at a rate of 32 turns/minute. The sheeted and cut dough was conveyed through a Casa Herrera 2000 BTU radiant heat oven with temperatures maintained from about 460° F. to about 540° F. Following baking, the dough pieces were directed to a Casa Herrera fryer system having a temperature from about 350° F. to 360° F., and fried until crisp.

We claim:

1. A method of producing a soy-based product comprising:  
25 preparing a dough by combining dry ingredients including a soy component and a pre-gelatinized starch with wet ingredients including water at a temperature sufficient to gelatinize the pre-gelatinized starch, wherein the soy component comprises from about 60% to about 90% by weight of the dry ingredients, the pre-gelatinized starch comprises from about 10% to about 40% by weight of the dry ingredients, and the wet ingredients comprise from about 25% to about 45% by weight of the dough;
- 30 sheeting the dough and cutting a dough piece from the dough; and  
baking the dough piece.
- 35 2. The method according to claim 1 further comprising, after baking, frying the dough piece.
- 40 3. The method according to claim 1 wherein the soy component is selected from the group consisting of soy flour, soy meal, soy grits, soy chips, powdered soy protein, soy protein isolates, and mixtures thereof.
- 45 4. The method according to claim 1, wherein pre-gelatinized starch is selected from the group consisting of pre-gelatinized grain starch, pre-gelatinized tuber starch, pre-gelatinized root starch, pre-gelatinized vegetable starch, pre-gelatinized legume starch, and mixtures thereof.
- 50 5. The method according to claim 1, wherein the dry ingredients further comprise a non-soy flour selected from the group consisting of grain flour, vegetable flour, plant flour, legume flour, and mixtures thereof, comprising less than about 30% by weight of the dry ingredients.
- 55 6. The method according to claim 5, wherein the non-soy flour comprises a pre-gelatinized flour.
7. The method according to claim 1, wherein the wet ingredients further comprise a milk.
8. The method according to claim 1, wherein the wet ingredients further comprise a milk substitute.
- 60 9. The method according to claim 1, wherein the dry ingredients further comprise a flavoring substance comprising less than about 50%, by weight, of the dry ingredients.
- 65 10. The method according to claim 1, wherein the dry ingredients further comprise a leavening agent comprising less than about 5%, by weight, of the dry ingredients.

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